

THE AMERICAN GENERA OF ASILIDAE (DIPTERA): KEYS FOR IDENTIFICATION WITH AN ATLAS OF FEMALE SPERMATHECA AND OTHER MORPHOLOGICAL DETAILS. VII. 2. SUBFAMILY STENOPOGONINAE HULL - TRIBES ACRONYCHINI, BATHYPOGONINI (WITH DESCRIPTION OF A NEW GENUS) AND CERATURGINI, AND A CATALOGUE OF THE NEOTROPICAL SPECIES*

LOS GENEROS AMERICANOS DE ASILIDAE (DIPTERA): CLAVES PARA SU IDENTIFICACION CON UN ATLAS DE LAS ESPERMATECAS DE LAS HEMBRAS Y OTROS DETALLES MORFOLOGICOS. VII. 2. SUBFAMILIA STENOPOGONINAE HULL-TRIBUS ACRONYCHINI, BATHYPOGONINI (CON DESCRIPCION DE UN NUEVO GENERO) Y CERATURGINI, Y CATALOGO DE LAS ESPECIES NEOTROPICALES

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ABSTRACT

A catalogue of the neotropical species of *Acronyches* Williston, 1908, only representative of the Tribe Acronychini, is given. *Carebaricus*, gen. n. (type-species, *Stenopogon rionegrensis* Lamas, 1971), the first neotropical Bathypogonini, is described. A key to the two nearctic genera of Ceraturgini is presented. Illustrations of the spermathecae and other morphological details are included.

KEYWORDS Insecta. Taxonomy. America. Asilidae. Stenopogoninae. Acronychini. Bathypogonini. Ceraturgini.

RESUMEN

Se presenta un catálogo de las especies neotropicales de *Acronyches* Williston, 1908, único representante de la tribu Acronychini. Se describe *Carebaricus*, gen. n. (especie-tipo, *Stenopogon rionegrensis* Lamas, 1971), el primer Bathypogonini neotropical. Una clave para los dos géneros neárticos de Ceraturgini es dada, así como ilustraciones de espermatecas y otros detalles morfológicos.

PALABRAS CLAVES Insecta. Taxonomía. América. Asilidae. Stenopogoninae. Acronychini. Bathypogonini. Ceraturgini.

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INTRODUCTION

Previous parts of this series of studies, dealing with the American genera of Asilidae, with illustrations of the female spermathecae and other morphological details, have been published as follows: Part I (Key to subfamilies and subfamily Leptogastrinae) in Gayana, Zool. 52(1-2):95-114, 1988; Part II (Dasypogoninae) in

Gayana, Zool., 52(3-4): 199-260, 1988; Part III (Trigonimiminae) in Bol. Soc. Biol. Concepción 60:35-41, 1989; Part IV (Laphriinae, except Atomosiini) in Bol. Mus. paraense Emilio Goeldi, Zool. 4(2):211-255, 1989; Part V (Stichopogoninae) in Bol. Soc. Biol. Concepción 61:39-47, 1990; Part VI (Laphriini (Atomosiini)) in Gayana, Zool. 55(1):53-87, 1991; Part VII.1 (Stenopogoninae, key to tribes) in Gayana, Zool. 55(2):139-144, 1991.

The methodology employed in the dissection and preservation of the male terminalia, female spermathecae and other morphological parts is the same employed by Artigas (1971).

Tribe ACRONYCHINI Artigas & Papavero

Genus *Acronyches* Williston

Acronyches Williston, 1908:388, fig. 103. Type-species, *Willistonii* Hermann (sub. des., Hermann, 1921:121).

Megonyx Hull, 1962:312. Type-species, *giganteus* Hull (orig. des.) = *fenestratulus* Hermann.

Ref. Papavero (1971).

alexanderi Papavero, 1971:147. Type-locality: Brazil, São Paulo, Mogi das Cruzes. Distr. Brazil (Rio de Janeiro, São Paulo). HT MZUSP.

fenestratulus Hermann, 1921:122. Type-locality: Paraguay, Santa Trinidad; Argentina. Distr.- Brazil (Amazonas) to Argentina. (Figs. 1, 2).

giganteus Hull, 1962:313, fig. 204 (*Megonyx*). Type-locality: Brazil, Amazonas, Manaus. HT AMNH.

geosarginus Papavero, 1971:148. Type-locality: Surinam, Paramaribo. HT MZUSP.

imitator Hermann, 1921:122. Type-locality: "Paraguay". Distr. Brazil (Mato Grosso), Paraguay. HT MUN.

maya Martin, 1968:180. Type-locality: Mexico, Yucatán Chichen Itzá. HT CMNH.

meruuna Papavero, 1971:149. Type-locality: Brazil, Espírito Santo, Linhares (Parque Sooretama). HT MZUSP.

plutactites Papavero, 1971:150. Type-locality: Costa Rica, Turrialba. HT MCZ.

rarus Martin, 1968:181. Type-locality: Mexico, Morelos, Yautepec. HT CAS.

westcotti Martin, 1968:182. Type-locality: Mexico, Nayarit, 20 mi. se. Ixtlán del Río. HT CAS.

willistonii Hermann, 1921:121. Type-locality: "Surinam". HT MUN.

Tribe BATHYPOGONINI Artigas & Papavero

The two genera of this tribe may be recognized by the following key:

1. Facial gibbosity not occupying entire length of face, but leaving a short flat area immediately below antennae; proboscis about as long bristles of mystax, or subequal to length of face. Occiput only with marginal bristles. Wing short, reaching only segment 5 of abdomen. Humeri without bristles. Femora incrassate. Pleura more or less bare. Male terminalia small and slender (Australia) *Bathypogon* Loew, 1851.
- Face gradually sloping from antennal base to oral margin. Proboscis very long and slender, much longer than length of bristles of mystax or length of face (Figs. 3-4). Occiput entirely covered by dense bristles and bristle-like hairs. Wing slightly longer than abdomen. Humeri with several strong bristles. Femora slender. Pleura pilose, especially above second coxa. Male terminalia very large and globose (Figs. 7-9). Female spermathecae as in Fig. 10 (Argentina, Chile) *Carebaricus*, gen. n.

Genus *Carebaricus*, gen. n.

(Figs. 3-10)

Body length, 25-35 mm.

Face broad, 1/4 or more width of head (Fig. 4). Oral margin as wide as face (Fig. 3). Frons 1/3 wider than face. Facial gibbosity occupying 3/4 of face, gradually sloping from antennae to oral margin. Mystax with long bristles on center of oral margin and shorter on the upper part of the gibbosity. Sides of oral margin bare, shining posteriorly. Ocellar and frontal bristles and hairs similar. Vertex and postocular area with abundant bristles, mostly directed upwards and backwards. Antennae situated on the upper 1/4 of head; pedicel and scape of about same length; first flagellomere subequal in length to combined length of scape and pedicel, attenuated on the apical half; second flagellomere minute; third flagellomere pointed at apex, 1/5 length of first. Proboscis long, oval in cross-section, straight. Palpus 2-segmented. Occiput entirely covered with dense bristles and bristle-like hairs.

Thorax: Prosternum dissociated from proepisternum. Pronotum with abundant bristles, as long and strong as the postoculars. Mesonotum more or less flat, covered with fine scattered hairs. Dorsocentral bristles hair-like, mostly appressed. Postsutural dorsocentrals stronger. Bristles on humeral callus, prealar, postalar, postcallar bristles and bristles on posterior margin of mesonotum long and strong, contrasting with the fine vestiture of the anterior 3/4 of the mesonotal disc. Scutellar disc with scattered fine hairs, 8-10 marginal scutellar

bristles, similar to the ones on the posterior callus. Mesopleura with fine hairs only. Anepisternum bare. Katepisternum with strong bristles.

Legs similar, with strong bristles similar to the humeral ones. Claws acute. Pulvilli 3/4 length of claws. Femora slender, not incrassate.

Wing: Cell r_1 open; 2 submarginal cells present; vein R_4 slightly recurrent, ending before wing apex; cell r_5 closed; anal cell closed at wing margin or slightly open; cell m_2 extremely wide, over twice as wide as high.

Abdomen: First abdominal segment as wide as thorax. Abdomen cylindrical, strongly tapered, 7 tergites visible from above in males, 8 in females. Male terminalia (Figs. 7-9) not rotated, epandrium small, divided into two halves, curved in and back at the apex; gonopods elongated; hypandrium free, large, globose, curved in on posterior border. Aedeagus small, with only one tube (Figs. 5-6). Female ovipositor with strong spines on the acanthophorites. Spermathecae with 3 elongated black capsules and fine capsular ducts (Fig. 10).

Type-species, *Stenopogon rionegrensis* Lamas, 1971.

Carebaricus rionegrensis (Lamas), n. comb.

Stenopogon rionegrensis Lamas, 1971:15, figs. 1, 2-4, 5. Type-locality: Argentina, Río Negro, R. Colorado. Distr.- Argentina (Río Negro, Neuquén). HT MZUSP.

Tribe CERATURGINI Artigas & Papavero

Only two genera, both nearctic. No Neotropical representative is known.

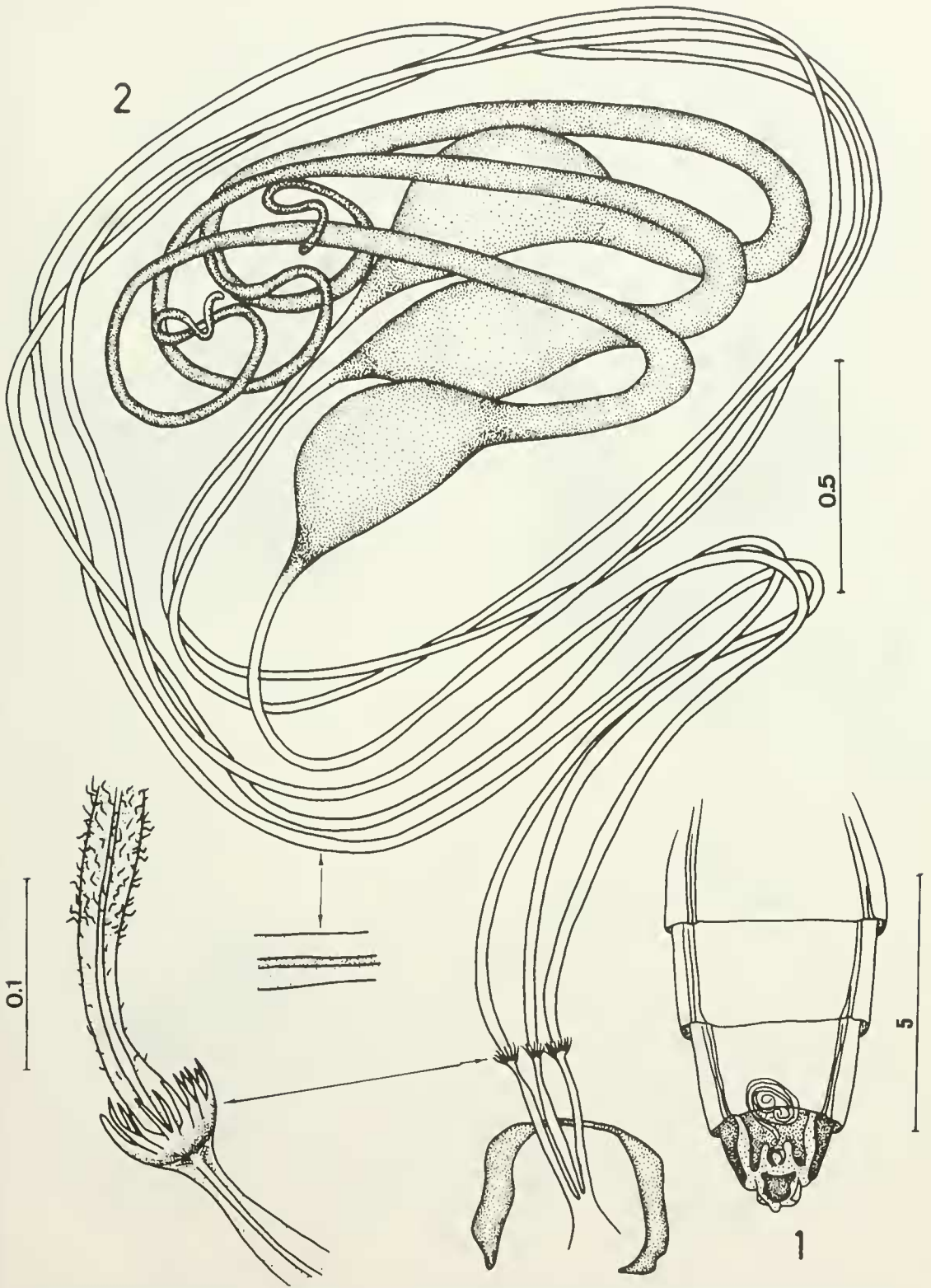
KEY TO GENERA:

1. Apex of first flagellomere and of second flagellomere with deep clefts, in which is received the attachment of the next succeeding segment*Myelaphus* Bigot, 1882
Antennae never as above. Spermathecae as in Figs. 11-12*Ceraturgus* Wiedemann, 1824

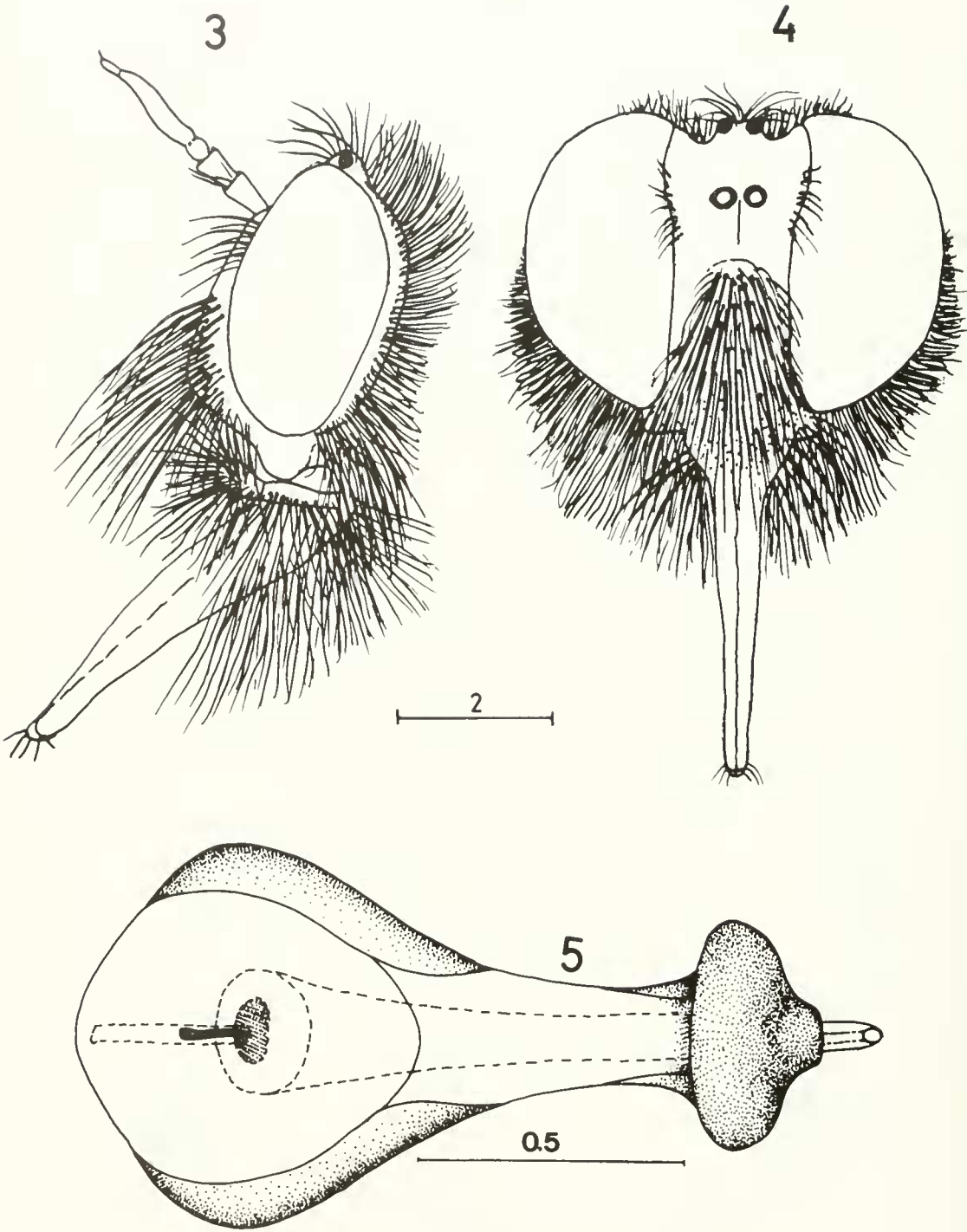
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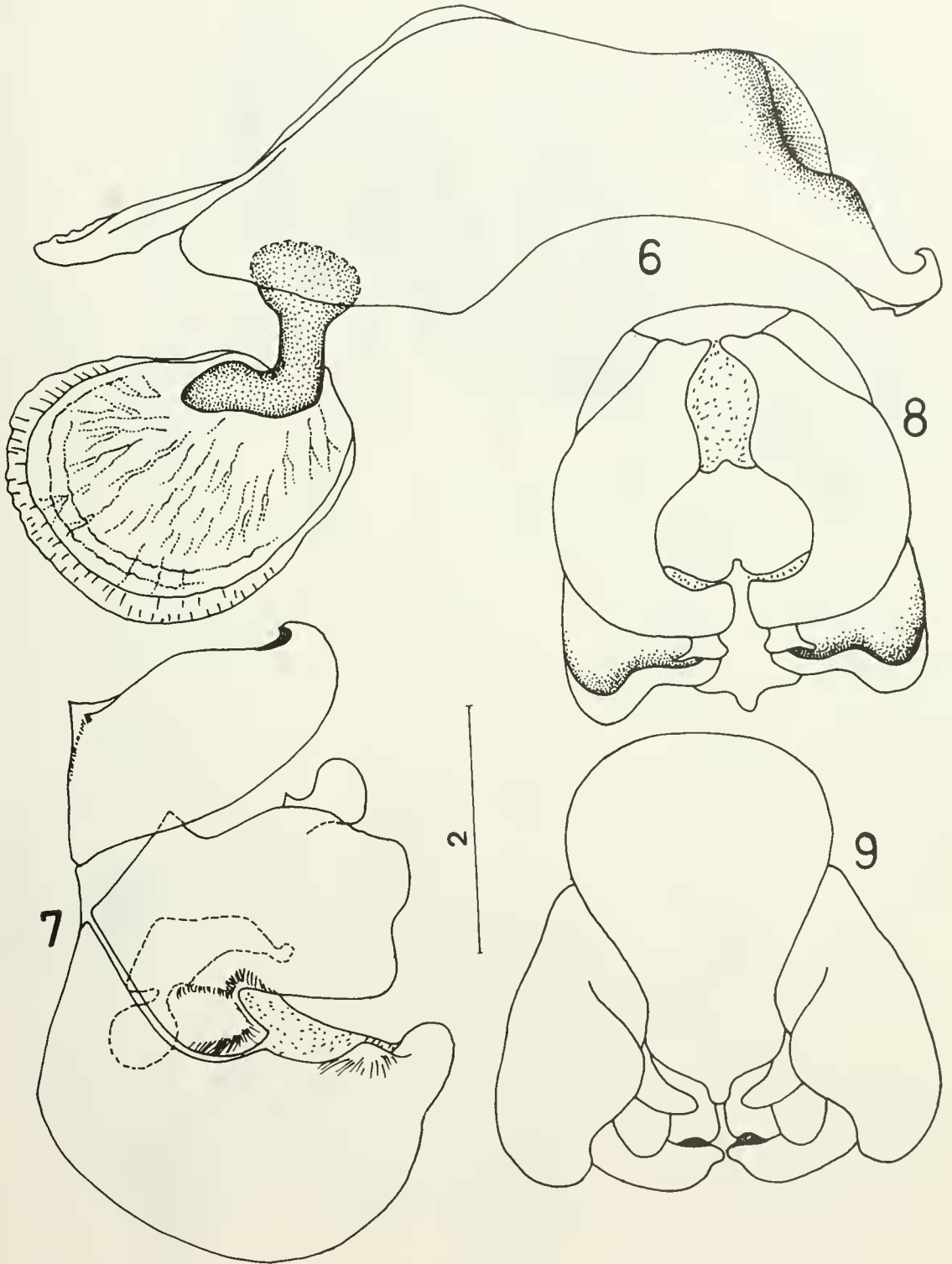
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FIGURAS 1-2: *Acronyches fenestratus* Hermann. 1, situation of the spermathecae in the abdomen. 2, spermathecae (scales in mm).



FIGURAS 3-5: *Carebaricus rionegrensis* (Lamas), head, in lateral (3) and frontal (4) views. 5, aedeagus in dorsal view (scales in mm).



FIGURAS 6-9: *Carebaricus rionegrensis* (Lamas). Aedeagus in lateral view (6). Male terminalia in lateral (7), dorsal (8) and ventral (9) views (scales in mm).

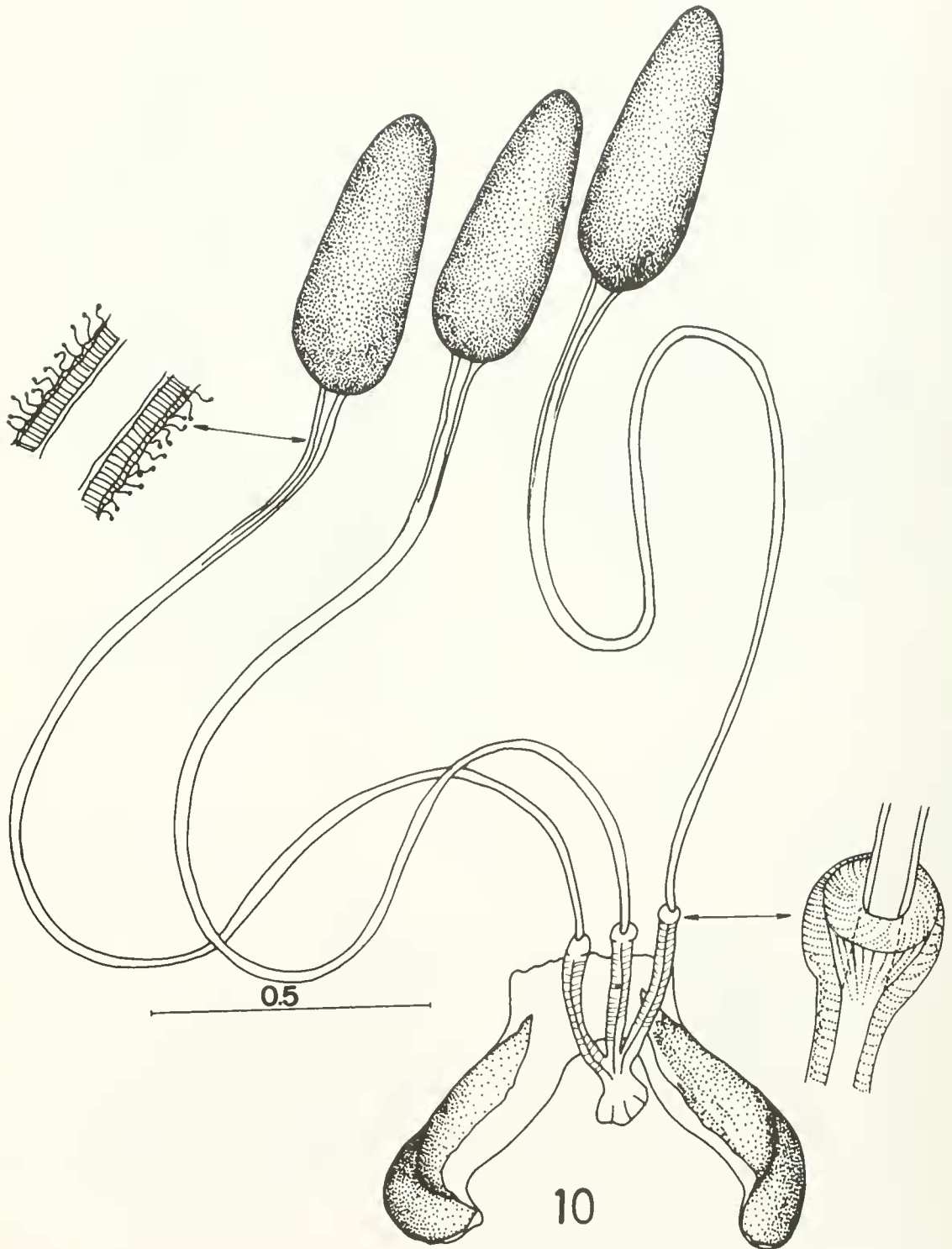
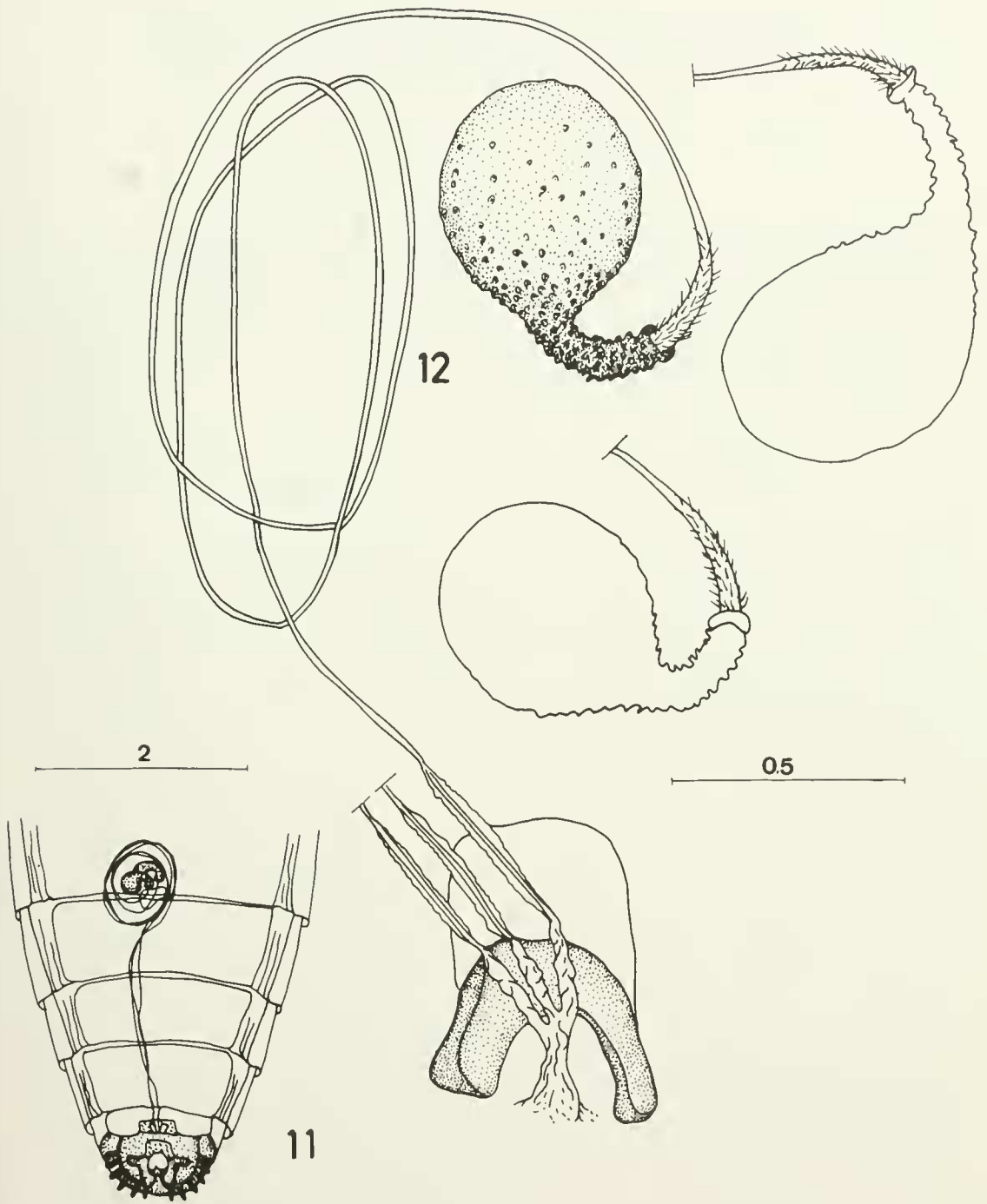


FIGURA 10: *Carebaricus rionegrensis* (Lamas). 10, spermathecae (scale in mm).



FIGURAS 11-12: *Ceraturgus cruciatus* Say. 11, situation of the spermathecae in the abdomen. 12, spermathecae (scales in mm).